A. General Data

1. System Maps (include geographic dimensions/regions)
2. Regional characteristics
    a. Line miles by voltage and UG/OH
    b. Substations by voltage
    c. URD miles by vintage
    d. Other
    e. SCADA, Protective Device Penetration Rates
    f. Reliability
        i. SAIDI, SAIFI, CAIDI, other (at the most detailed regional, sector available)
3. Other Reliability Programs
        i. Worst Performing Circuits
        ii. Worst Performing Circuits Improvement Measures
            1. Repeat offenders
        iii. Customers Exceeding Reportable Targets Program Data underserved customers)
            1. Underserved Customers Measures
            2. Repeat offenders

B. Planning (non-bulk system)

1. Methods
2. Criteria
3. Consideration of non-wires solutions
4. Assessment of DER cases

C. AMI Data

1. AMI & MDMS
    a. Accounts with AMI delivery by class
    b. Operating capabilities
    c. Operating performance
    d. Capital expenditures
    e. Information capabilities and use re: system operations and data storage
    f. Cybersecurity capabilities and testing results
    g. AMI-related metrics
2. Customer Information Systems and Customer Portals/Apps
    a. Information capabilities and use re: system operations and data storage
    b. Percentage of AMI Accounts viewing Portal

c. Percentage of Green Button Accounts requesting data sharing, Green Button eligible accounts

3. GIS
    a. Penetration
    b. Accuracy
    c. Information capabilities
4. OMS and EMS
    a. Capabilities
    b. Enhancement/Replacement Plans
5. DES
    a. Capabilities to support real time DES data and control
    b. Operating experience with DES

D. Transmission and Distribution Substations

1. Equipment Configuration
    a. Multiple Sources
    b. SCADA
        i. Information
        ii. Automation
        iii. Remote Operation
    c. Protective Devices
    d. Loads
        i. Peaks
        ii. Thermal Operating Limits
        iii. Operating History Relative to (*e.g.*, exceeding) Operating Limits
2. Physical Conditions
    a. Ages (by voltage showing numbers in families of 10-years)
        i. Transformers
        ii. Circuit Breakers
3. Practices (by Region, if different)
    a. Maintenance Cycles and Methods
    b. Inspection Completion Rates
    c. PMs and CMs (numbers performed and backlogged)
    d. Yearly Replacements
        i. Transformers
        ii. Circuit Breakers
        iii. Relays

E. Sub-Transmission Lines

1. Configuration
    a. Multiple sources

   b. Circuit Routing
   c. Underground vs. Overhead (numbers and circuit mileage by voltage - - and region)
   d. Multiple Sources
   e. SCADA
   f. Protective Devices
   g. Loads
2. Physical Conditions
   a. Pole Age (by voltage showing numbers by families of 10-years)
   b. Overhead Conductor Age (by voltage showing miles by families of 10-years)
   c. Underground Conductor Age (by voltage showing miles by families of 10-years
3. Practices
   a. Vegetation Management
      i. Cycles
      ii. Backlogs
   b. Maintenance Cycles and Methods
   c. Inspection Completion Rates
   d. PMs and CMs (numbers performed and backlogged)
   e. Yearly Replacements

F. Feeders

1. Configuration
   a. Numbers by region and voltage
   b. Automatic Sectionalizing and Restoration
   c. Underground vs. Overhead (numbers and circuit mileage by voltage and region)
   d. SCADA
   e. Protective Devices
   f. Loads
   g. Pole Age (by voltage showing numbers by families of 10-years)
   h. Overhead Conductor Age (by voltage showing miles by families of 10-years)
   i. Underground Conductor Age (by voltage showing miles by families of 10-years)
2. Physical Conditions
   a. Pole Age (by voltage showing numbers by families of 10-years)
   b. Overhead Conductor Age (by voltage showing miles by families of 10-years)
   c. Underground Conductor Age (by voltage showing miles by families of 10-years)
3. Practices
   a. Vegetation Management
      i. Cycles
      ii. Backlogs
   b. Maintenance Cycles and Methods
   c. Inspection Completion Rates
   d. PMs and CMs (numbers performed and backlogged)
   e. Yearly Replacements

i. Transformers
ii. Circuit Breakers
iii. Relays

RESPONSES:

For A - General Data – 3 – i-iii

- This information for Worst performing circuits and CERTs was provided per our annual 411 reports (EB 1.09 Attach 1 thru Attach 9)

For B - Planning – 1 & 2

- This information was provided per our engineering standards and planning criteria (EB 1.09 Attach 27 thru Attach 29)

For C- AMI – 1 & 2

- AMI Annual Update will provide the most recent status on topics 1 and 2. This report was filed each year with the ICC starting in 2013

For D - Transmission and Distribution Substations – 3 – a

- The maintenance cycle information and methods for substation and relay was provided in EB 1.09 Attach 22, Attach 23, and Attach 25

For D - Transmission and Distribution Substations – 3 – c

- For the PM's for substation and relay, this information is included in our Annual 411 reports (EB 1.09 Attach 1 thru Attach 9)

For E – Transmission Lines -3-a.i.ii

- Our sub-transmission circuits are patrolled and trimmed on a 4 year trim cycle. The majority of the sub-transmission system has under-build attached which is maintenance trimmed on a 4 year cycle, and during this time any isolated sub-transmission lines are included as part of the cycle. There is no backlog. This information is contained in our annual 411 reports (EB 1.09 Attach 1 thru Attach 9)

For E – Sub-Transmission Lines – 3 – b

-The maintenance information and methods for ST lines was provided in EB 1.09 Attach 19 and Attach 20

- This information is also included in our Annual 411 reports (EB 1.09 Attach 1 thru Attach 9)

For F – Feeders – 3 – a

- Vegetation Management for feeders is included in our Annual 411 reports (EB 1.09 Attach 1 thru Attach 9)

For F- Feeders 3.a.i.ii

-Our feeders are patrolled and trimmed on a 4 year trim cycle. There is no backlog. This information is contained in our annual 411 reports

For F – Feeders – 3 – b

- The maintenance information and methods for feeders was provided in EB 1.09 Attach 19

- This information is also included in our Annual 411 reports (EB 1.09 Attach 1 thru Attach 9)